TEXAS DEPARTMENT OF INSURANCE

Engineering Services / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104 Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION

WIN-1471

Effective November 1, 2011

The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code** (IRC) and the **International Building Code** (IBC). This product shall be subject to reevaluation **January 2015**.

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Series 350 Vinyl Horizontal Slider Windows, New and Replacement Construction, Non-Impact Resistant, manufactured by

Pella Corporation 102 Main Street Pella, Iowa 50219

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will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Series 350 horizontal slider windows specified in this report are vinyl horizontal slider windows. The vinyl horizontal slider windows may be installed as new construction windows or as replacement windows. This report includes non-impact resistant vinyl horizontal slider windows based on the following tested configurations:

General Description:

System	Description	Label Rating
1	Series 350; Vinyl Horizontal Sliding Windows; Fin Install; (XO)	HS-LC45 76 x 48
2	Series 350; Vinyl Horizontal Sliding Windows; Fin Install; (XOX)	HS-LC40 96 x 48
3	Series 350; Vinyl Horizontal Sliding Windows; Fin Install; (XOX)	HS-LC35 76 x 72
4	Series 350; Vinyl Horizontal Sliding Windows; Fin Install; (XO)	HS-LC40 76 x 72
5	Series 350; Vinyl Horizontal Sliding Windows; Frame Install; (O/XO)	HS-LC40 76 x 96
6	Series 350; Vinyl Horizontal Sliding Windows; Fin Install; (O/XO)	HS-LC40 76 x 96
7	Series 350; Vinyl Horizontal Sliding Windows; Fin Install; (XOX)	HS-LC40 114 x 62
8	Series 350; Vinyl Horizontal Sliding Windows; Frame Install; (XOX)	HS-LC40 114 x 62

General Description (continued):

System	Description	Label Rating	
9	Series 350; Vinyl Horizontal Sliding Windows; Fin Install; (XOX)	HS-LC30 114 x 72	
10	Series 350; Vinyl Horizontal Sliding Windows; Frame Install; (XOX)	HS-LC25 123 x 72	
11	Series 350; Vinyl Horizontal Sliding Windows with Transom; Fin Install; (O/XOX)	HS-LC40 120 x 78	
12	Series 350; Vinyl Horizontal Sliding Windows with Transom; Frame Install; (O/XOX)	HS-LC40 120 x 78	

Product Dimensions:

System	Overall Size	Active Sash Size	Fixed Daylight Opening
1	76" x 48"	One: 38 ½ " x 45 ½ "	One: 34 7/16" x 41 9/16"
2	96" x 48"	Two: 24" x 45 ¾ "	One: 45 ½ "x 41 ½"
3	76" x 72"	One: 38 ½ " x 69 ½ "	One: 34 ½ "x 65 ½ "
4	76" x 72"	One: 38 ½ " x 69 ½ "	One: 34 ½ " x 65 ½ "
5	76" x 96"	One: 38 ½ " x 69 ½ "	One: 34 ½ " x 65 ½ "
			One: 72 ½ x 19 ½ "
6	76" x 96"	One: 38 ½ " x 69 ½ "	One: 34 ½ " x 65 ½ "
			One: 72 ½ x 19 ½ "
7	114" x 62"	Two: 38 ½ " x 59 ½ "	One: 34 15/16" x 55 9/16"
8	114" x 62"	Two: 38 ½ " x 59 ½ "	One: 34 15/16 " x 55 9/16"
9	114" x 72"	Two: 38 ½ " x 69 ½ "	One: 34 15/16 " x 65 9/16"
10	123" x 72"	Two: 31" x 69 ½"	One: 58 ½ " x 65 ½ "
11	120" x 78"	Two: 30" x 59 ½ "	One: 57 ½ "x 54 ½ "
			One: 116 ½ x 12 ½ "
12	120" x 78"	Two: 30" x 59 ½ "	One: 57 ½ "x 54 ½ "
			One: 116 ½ x 12 ½ "

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1-12	IG-1	GM-1

Note: ¹ See the "Glass Construction Key" for the glazing construction.

Glass Construction Key:

IG-1: Sealed insulating glass units. In the active sash, the insulating glass unit is comprised of two double strength (1/8") annealed glass lites separated by a metal reinforced butyl spacer system. In the fixed sash, the insulating glass unit is comprised of two 3/16" annealed glass lites separated by a metal reinforced butyl spacer system. The glass thickness and type used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

 $^{^{\}rm 2}$ See the "Glazing Method Key" for the glazing method description.

Glazing Method Key:

GM-1: The insulating glass units are exterior glazed against polyurethane reactive sealant. The insulating glass units are secured with snap-in vinyl glazing beads.

Frame Construction: The frame members are manufactured from extruded vinyl (PVC). The frame corners are mitered and welded construction.

Sash Construction: The sash members are manufactured from extruded vinyl (PVC). The sash corners are mitered and welded construction.

Reinforcement: Extruded aluminum reinforcement is utilized in the sash meeting stile and in the fixed meeting stile. The reinforcement extends the full length of the members.

Hardware:

- Sliding window roller assembly; Two (2) required in each sash; Located in the sash bottom rail.
- Spring loaded metal cam lock with detent and strikes or positive action lock and strike; One (1) required per sash; Located at the center of the meeting rail.

Product Identification: A certification program label (WDMA) will be affixed to the window. The certification program label includes the manufacturer's name; the name of the product: **350 Series Sliding Window, Annealed**; performance characteristics; the approved inspection agency (WDMA); and the applicable standards: ANSI/AAMA/NWWDA 101/I.S.2-97 and AAMA/WDMA/CSA 101/I.S.2/A440-05.

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	76	48	± 45
2	96	48	± 40
3	76	72	± 35
4	76	72	± 40
5	76	96	± 40
6	76	96	± 40
7	114	62	± 40
8	114	62	± 40
9	114	72	± 30
10	123	72	± 25
11	120	78	± 40
12	120	78	± 40

Impact Resistance: These window assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These window assemblies will need to be protected with an impact protective system when installed in areas where windborne debris is required.

Acceptance of Smaller Assemblies: Windows assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be installed in accordance with the manufacturer's installation instructions and this evaluation report. Detailed installation instructions and drawings are available from the manufacturer.

Installation:

System 1, 2, 3, 4, 6, 7, 9, 10, 11 (Fin Installation): The wood wall framing members shall be minimum Southern Yellow Pine dimension lumber. The windows shall be mounted to the wood wall framing members using the nailing fin of the window with minimum No. 10 screws with 1" diameter washers. The fasteners shall be spaced approximately 4 inches from each corner and one (1) at the center of each side jamb, at the head, and at the sill. In addition, a fastener shall be located at the meeting rail and approximately 4 inches on either side of the meeting rail at the head and the sill. The fasteners shall be long enough to penetrate a minimum of 1½ inches into the wood wall framing.

System 5, 8, 12 (Frame Installation): The wood wall framing members shall be minimum Southern Yellow Pine dimension lumber. The windows shall be mounted to the wood wall framing members using the frame of the window with minimum No. 10 x 2" screws. Along the head, the fasteners shall be spaced approximately 6 inches from each corner and approximately 16 inches on center. Along each side jamb, the fasteners shall be spaced approximately 6 inches from each corner and approximately 16 inches on center. In addition, a fastener shall be located at the meeting rail and approximately 4 inches on either side of the meeting rail at the head and the sill. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wood wall framing.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.